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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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[REDACTED] ART UNIT [REDACTED] PAPER NUMBER

2663

DATE MAILED: 07/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|------------------|----|
| Office Action Summary | Application No. | Applicant(s) | NL |
| | 09/109,343 | JAGANNATH ET AL | |
| | Examiner Andrew Lee | Art Unit 2663 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 22 May 2002.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-32 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. . | 6) <input type="checkbox"/> Other: _____ . |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-7, and 26-28 are rejected under 35 U.S.C. 102(e) as being anticipated by admitted prior art fig 2.

Re Claims 1 and 26-28, Admitted prior art fig 2 teaches the routing system using the VPN-IDs and reachability information. In particular, fig 2 teaches receiving a packet including VPN-ID [label], IP header and payload; a Route table 206 associates with the VPN-ID. It is inherent that the routing system includes a processor for processing the packet with the table.

Re Claims 2, 3, route/forwarding table 206.

Re Claim 4, VPN-ID 201 is the label for the VPN.

Re Claim 5, it is inherent that the router includes an second port for transmitting the packet.

Re Claim 6, IP header is the Internet Protocol Header.

Re Claim 7, VPN-ID is the label and the reachability information is the forwarding label.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8-20, and 29-32 rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art fig 2.

Re Claims 8, 16, and 29-32, it is well known that the ISP may support plurality of VPNs and use private address spaces. Admitted prior art fig 2 teaches routing system wherein various VPNs can be unambiguously differentiated by indexing VPN-Ids (a second label) stored in the routing table 206. Admitted prior art fig 2 fails to explicitly teach that maintaining a first and second tables corresponding to the first and second VPN networks. One of ordinary skilled would have realized the storing device for the routing table 206 could be configured to support plurality of tables, i.e., one table per VPN-ID. The motivation would have been to support various private addressing spaces. Therefore, it would have been obvious to one ordinary skilled configure the storing device to support plurality of tables corresponding to plurality of VPN addressing spaces.

Re Claims 9 and 10, route/forwarding table 206.

Re Claims 11, 13, 15, 18, and 20, refer to Claim 8, VPN-ID 201 is the label for the VPN and provide indexing.

Re Claims 12, and 17, fig 2 teaches receiving a packet including VPN-ID [label], IP header and payload.

Re Claims 14 and 19, VPN-ID is the label and the reachability information is the forwarding label.

5. Claims 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bots et al U.S. Patent Number 6,226,748 B1 in view of Admitted prior art fig 2.

Re Claim 21, Bots et al teaches in fig 2, VPNU (edge router) coupled to the Internet 250 (wide area network) wherein fig 3 teaches step 350, which transmits the packet comprising, encapsulated packet headers (a first and a second header) over the network (see col. 6, lines 53 +). Bots et al fails to explicitly teach the modified packet having a label. Admitted prior art fig 2 teaches a routing system wherein various VPNs can be unambiguously differentiated by indexing VPN-IDs [label] stored in the routing table 206. One of ordinary skill would have been motivated by the admitted prior art fig 2 to use VPD-ID indexing to support multiple VPNs. Therefore, it would have been obvious to one ordinary skilled to incorporate the Admitted prior art fig 2 into the teaching of Bots et al.

Re Claim 22, VPN-ID 201 is the label for the VPN.

Re Claim 23, VPN-ID is the label and the reachability information is the forwarding label.

Re Claim 24, Internet 250 fig. 2 of Bots comprises of backbone router with routing tables.

Response to Arguments

6. Applicant's arguments filed 5/22/02 have been fully considered but they are not persuasive.

Regarding Claims 1-7 and 21-24, Applicant argues that admitted prior art figure 2 fails to teach or suggest, "a separate table associated with each label".

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a separate table associated with each label) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding Claims 8-20, Applicant argues that, "to support various private addressing spaces, one or ordinary skill in the art would have configured a routing table into multiple routing tables" is insufficient as a matter of law because it does not rely on the teachings of the references and is based on hindsight.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does

not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

For instance, the knowledge of "ISP supporting multiple VPNs with associated private address space" is based on applicant admitted prior art (See page 2, lines 23-26 of Specification).

Furthermore, applicant argues that, "prior art references and that one of ordinary skill in the art would have been able to combine them is insufficient as a matter of law. There must be a motivation to combine these components in the manner claimed.

However, there is no combination of references. The obvious type rejection is based on modification of a single admitted prior art.

Furthermore, the examiner recognizes that obviousness can only be established by modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the knowledge generally available to one of ordinary skill is the recognition that memory is configurable to support multiple tables. As suggested by the admitted prior art, ISP desires to support multiple VPN networks. In order to support multiple VPN networks, the memory can be configured with multiple tables to support multiple VPNs.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Callon U.S. Patent Number 5,583,862 teaches routing protocol supporting virtual networks.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

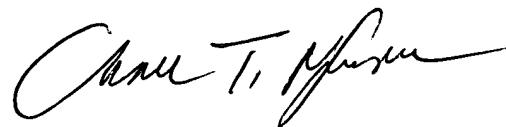
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Lee whose telephone number is 703-305-1500. The examiner can normally be reached on Monday to Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 703-308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



July 24, 2002



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SUPERVISORY PATENT EXAMINER
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